

6th Semester (Code-601 E-Commerce)

Unit-1

Introduction to E-Commerce: the Scope of Electronic Commerce, Definition of Electronic Commerce, Electronic Data Interchange, Internet commerce, E-Commerce in Perspective, Business Strategy in an Electronic Age, E-Commerce Implementation, E-Commerce Evaluation.

Unit-2

Business-to-Business Electronic Commerce: characteristics of B2B EC, Models of B2B EC, Procurement Management Using the Buyer's Internal Marketplace, Just-in-Time Delivery, Other B2B models, Auctions and Services from Traditional to Internet Based EDI, Integration with Back-end Information Systems, The Role of Software Agents for B2B, Solutions of B2B EC, Managerial issues.

Unit-3

Electronic Data Interchange (EDI), EDI, EDI & Business, Intranet and Extranet: Automotive Network Exchange, The Largest Extranet, Architecture of the Internet, Intranet and Extranet, Intranet Software, Applications of Intranets, Intranet Application Case studies, Consideration in Intranet Deployment, The Extranets.

Unit-4

Electronic Payment Systems, Electronic Payment Protocols, Security Schemes in Electronic Payment Systems, Electronic Credit Card System on the Internet, Electronic fund Transfer and Debit Cards on the Internet, Stored-Valued Cards and E-Cash, Electronic Check Systems, Prospect of Electronic Payment Systems, Encryption Policies.

Unit-5

Infrastructure for EC: It Takes more than Technology, A Network of Networks, Internet Protocols, Web- Based client/ Server, Internet Security, Selling on the Web, chatting on the Web, Multimedia delivery, Analyzing Web Visits, Managerial issues. Economics, Global & Other Issues in EC: Competition in Marketplace, some Issues on Digital Economy and Success Factors, Impacts on Industry Structure, The Future of EC.

6th Semester (Code-602 Data Mining And Warehouse)

Unit-1

Overview, Motivation (for Data Mining), Data Mining- Definition & Functionalities, Data Processing form of Data Processing, Data Cleaning: Missing Values, Noisy Data, (Binning, Clustering, Regression, Computer and Human inspection), Inconsistent Data, Data Integration and Transformation, Data Reduction:- Data Cube Aggregation, dimensionality reduction, Data Compression, Numerosity Reduction, Clustering, Discretization and Concept hierarchy generation.

Unit-2

Concept Description: - Definition, Data Generalization, Analytical Characterization, Analysis of attribute relevance, Mining class comparisons, Statistical measures in Large Database. Measuring Central Tendency, Measuring Dispersion of Data, Graph Displays of Basic Statistical class Description, Mining Association Rules in Large Database.

Unit-3

Classification and Predictions: - What is Classification & Prediction, Issues regarding Classification and prediction, Decision tree, Bayesian Classification, classification by Back propagation, Multilayer feed- forward Neural Network, Back Propagation Algorithm, Classification methods Knearest neighbor classifiers, Genetic Algorithm . Grid based Methods. Model Based Method Statistical Approach, Outlier Analysis.

Unit-4

Data Warehousing: Overview, Definition, Delivery Process, Difference between Database System and Data Warehouse, Multi Dimensional Data Model, Data Cubes, Stars, Snow Flakes, Fact Constellations, concept hierarchy, Process Architecture, 3Tier Architecture, Data Marting.

Unit-5

Aggregation, Historical information, Query Facility, OLAP function and Tools. OLAP Servers, ROLAP, MOLAP, HOLAP, Data Mining Interface, Security, Backup and Recovery, Tuning Data Warehouse, Testing Data Warehouse.

6th Semester(Code-603 Secure Computing)

Unit-1

Introduction to security attacks, services and mechanism, introduction to cryptography. Conventional Encryption: conventional encryption model, classical encryption techniques- substitution ciphers and transposition ciphers, cryptanalysis, stereography, stream and block ciphers.

Unit-2

Modular arithmetic, Fermat's and Euler's theorem, primality testing, Euclid's Algorithm, Chinese Remainder theorem. Principals of public key crypto systems, RSA algorithm, security of RSA, key management, Diffie-Hellman key exchange algorithm.

Unit-3

Message Authentication and Hash Function: Authentication requirements, authentication function, message authentication code, hash functions, birthday attacks, security of hash functions and MACS, MD5 message digest algorithm, Secure hash algorithm(SHA). Digital Signatures: Digital Signature, authentication protocols.

Unit-4

Authentication Applications: Kerberos and X.509, directory authentication service, electronic mail security-pretty good privacy (PGP), S/MIME.

Unit-5

Web Security: Secure socket layer and transport layer security, secure electronic translation (SET). System Security: Intruders, Viruses and related threads, firewall design principals, trusted systems.